

RETROFITTABLE NON-METALLIC BRUSH SEAL ASSEMBLY

ABSTRACT OF DISCLOSURE

[0036] A bearing assembly for supporting a rotating component of a rotary machine includes a bearing housing and a metallic clearance seal attached to the bearing housing. The metallic clearance seal having at least one tooth is configured to extend radially outward from the bearing housing spaced apart from the rotating component to define an envelope having a pre-determined cross-sectional shape. A non-metallic brush seal assembly is fixedly attached to the metallic clearance seal having a second pre-determined cross-sectional shape. The non-metallic brush seal assembly is adapted to the metallic clearance seal to extend through the envelope and terminate in substantially intimate contact with the rotating component. The non-metallic brush seal assembly comprises a plurality of fibers to substantially arrest leakage of a lubricant from the bearing housing to the envelope.